

II REVENUE REQUIREMENT

The maximum allowed regulated revenue is used to determine the maximum prices that TasWater can charge for regulated tariffs such that if the amount for each of the regulated prices, fees and charges discussed in Chapter 13 were to be applied to the demand for each service, the resultant aggregate revenue would not exceed the maximum allowed regulated revenue.

11.1 TasWater's proposed regulated revenue

TasWater's proposed building block components and estimated maximum allowed regulated revenue for each year of the third regulatory period are shown in Table 11.1.

Table 11.1 TasWater's proposed maximum allowed regulated revenue (\$'000s)

	2018-19	2019-20	2020-21
Opex	174 781	178 691	185 260
Regulatory Depreciation	109 967	114 906	119 859
Return on capital	157 908	165 021	171 852
Inflationary gain offset	-71 178	-73 377	-83 864
Working capital	1 585	1 621	1 661
Tax allowance	22 021	23 514	24 954
Total regulated revenue	395 085	410 378	419 722

11.2 Economic Regulator's proposed regulated revenue

As discussed in Chapters 7, 8, and 9 the Economic Regulator has proposed alternative values for opex, regulatory depreciation and return on capital.

11.2.1 Inflation adjustment

As discussed in Chapter 10, the RAB is adjusted annually for inflation through the RAB roll forward. In previous investigations the Economic Regulator used a pre-tax real WACC which is net of inflation. As explained in Chapter 9, for the third regulatory period the Economic Regulator intends accepting TasWater's proposal to use a post-tax nominal vanilla WACC which includes compensation for inflation. Therefore, to avoid double counting for the impact of inflation, the inflationary adjustment component of the RAB roll forward must be removed. The Economic Regulator accepts TasWater proposal to include an adjustment for inflation in its regulated revenue build up.

Based on the Economic Regulator's proposed RAB roll forward calculations in Table 10.2 the Economic Regulator has calculated the adjustment for inflation that must be deducted in calculating TasWater's regulated revenue. The Economic Regulator's proposed inflation adjustment values are shown in Table 11.2.

Table 11.2 Economic Regulator's proposed adjustment for inflation (\$'000s)

	2018-19	2019-20	2020-21
Inflation adjustment	- 71 354	- 73 817	- 76 203

11.2.2 Tax allowance

TasWater proposes including a tax allowance as a component of its regulated revenue build up. TasWater states that the tax allowance for regulatory purposes is based on the total regulatory revenue which would create a circularity issue as the tax allowance is one of the components of the regulatory revenue. To avoid this, TasWater proposes calculating tax only on the return on equity component of the return on capital component of the regulated revenue. TasWater justifies this calculation on the basis that its proposed prices will not recover the total revenue allowed and actual profit will be lower than the profit implied by the regulatory tax calculation.

The Economic Regulator concurs that by changing to a post-tax nominal vanilla WACC there is a need to include a tax allowance component in the regulated revenue build up.

The rationale for the post-tax building block revenue approach is that calculating a separate tax allowance in the revenue build up enables a more accurate estimate of an efficient benchmark business' tax liability.

The tax allowance is calculated using taxable revenue which is calculated as:

Regulated revenue

- forecast opex (as determined for the maximum revenue allowance build up)
- interest (cost of debt x gearing ratio x RAB)
- tax depreciation (determined using a Tax Asset Base (TAB))
- applicable tax losses

multiplied by the corporate tax rate (adjusted for gamma).

Regulatory revenue and taxable revenue are generally not identical. The applicable effective tax rate for the regulated business may therefore be significantly different from the corporate tax rate. Consequently, the use of the corporate tax rate may result in a regulated business being over compensated for tax liabilities.

To enable regulators to calculate a tax allowance the regulated business must create a Tax Asset Base (TAB) in addition to the RAB. The TAB must include the value of the regulated assets for tax purposes and therefore will differ to the DORC valuation used in for the RAB. In addition a regulated business must determine the value of any accumulated tax losses and apportion the tax losses between its regulated and unregulated activities. The TAB is then used to calculate tax depreciation which will differ from the value of the regulatory depreciation. The difference is due to the different asset values and methods used to depreciate assets for tax purposes.

Information required to establish a TAB includes:

- a commencement date, such as the date of corporatisation;
- the value of regulated assets for tax purposes at the commencement date; and
- the applicable tax depreciation rate or effective life of the assets for taxation purposes.

Like the RAB, the TAB would need to be rolled forward every year since the commencement date incorporating the relevant tax depreciation provisions and actual capex and disposals. Capex would be recognised on an 'as commissioned' basis to provide an actual estimate of tax depreciation for rolling forward the TAB.

The ability of a business to claim accelerated depreciation and accumulated tax losses will result in the TAB differing from the RAB with the difference increasing each roll forward period. From past experience⁶¹, the Economic Regulator is aware that establishing a TAB using historical data is a time consuming and complex exercise and may require certain assumptions to be made where the information is incomplete.

TasWater has not created a TAB and proposes that tax depreciation equal regulatory depreciation and has assumed no applicable tax losses. Therefore, where the tax and regulatory depreciations amounts are the same and there are no applicable tax losses, TasWater proposes that the taxation allowance with respect to new assets is calculated as follows:

$$\text{Return on equity (post-tax)} \times T / (1 - T (1 - \gamma))$$

Where:

T = corporate tax rate

Gamma = value of imputation credits

This formula can be re-written as follows to determine the tax allowance with respect to existing assets:

$$\text{Return on equity (pre-tax)} \times T (1 - \gamma)$$

Based on the values calculated in Chapters 9 and 10 and the above formula, the Economic Regulator's tax allowance calculation and proposed tax allowance values are shown in Table 11.3.

⁶¹ Aurora Energy Pty Ltd (Distribution), 2011.

Table 11.3 The Economic Regulator's tax allowance calculation (\$'000s)

	2018-19	2019-20	2020-21
Gearing	0.60		
Equity %(1-gearing)	0.40		
Existing assets	2 538 401	2 544 838	2 551 596
Equity Existing Assets (assets * equity %)	1 015 360	1 017 935	1 020 638
New assets	723 294	825 851	944 508
Equity New Assets (assets * equity %)	289 318	330 340	377 803
<i>Return on Equity (RoE) rates</i>			
Existing assets (pre-tax)	3.00%		
New assets (post-tax)	7.12%		
Conversion factor (1/(1-30%))	1.43		
New assets (pre-tax) (post tax rate * conversion factor)	10.17%		
<i>RoE (pre-tax)</i>			
Existing assets (Equity * pre-tax RoE rate)	30 461	30 538	30 619
New assets	29 434	33 608	38 437
Total RoE	59 895	64 146	69 056
<i>Tax on RoE</i>			
Corporate Tax rate	30.00%		
Gamma	40.00%		
Tax rate for RoE (30%*(1-gamma))	18.00%		
Tax allowance (Tax rate for RoE * RoE)	10 781	11 546	12 430

The Economic Regulator intends to require TasWater to develop a Tax Asset Base prior to the commencement of the fourth regulatory period.

11.2.3 Working Capital Allowance

TasWater has proposed including a working capital allowance as an additional, separate building block component. The purpose of working capital is to provide short term liquidity. TasWater proposed the allowance in order to compensate it for the opportunity cost of holding additional funds to cover the delay between paying suppliers and receiving revenue from customers.

The Economic Regulator notes that both the ESC of Victoria and the AER consider a working capital allowance to be unnecessary due to the timing of cashflows for the businesses that they regulate. Neither regulator has approved a working capital allowance since 2000 and 2002 respectively.

The Queensland Competition Authority (QCA) has allowed SunWater a working capital allowance. However, in its report to the QCA, Deloitte notes that SunWater has only 22 bulk water scheme customers compared to electricity and gas distributors who have thousands of customers. SunWater may experience cash flow issues due to its small number of customers such that a working capital allowance was considered appropriate.⁶²

A working capital allowance has not been part of the building block approach used in the two previous regulatory periods for TasWater and its predecessor regional corporations. Further, unlike Sun Water, TasWater has a considerable customer base, billed on a quarterly basis and the fixed charge

⁶² Deloitte report to the Queensland Competition Authority, *SunWater - Working Capital Allowance, Final Report, 23 August 2011*, page 11.

components of regulated tariffs are billed in advance. The Economic Regulator considers that TasWater has not demonstrated that it has liquidity issues that would warrant the inclusion of a working capital allowance.

The Economic Regulator intends not allowing TasWater's proposed Working Capital Allowance.

11.3 Economic Regulator's proposed regulated revenue

The Economic Regulator's proposed values for each building block component and maximum allowed regulated revenue for each year of the third regulatory period is provided in Table 11.4.

Table 11.4 Economic Regulator's proposed regulated revenue (\$000s)

	2018-19	2019-20	2020-21
Opex	169 862	173 149	178 848
Depreciation	86 705	91 112	95 773
Return on capital	143 884	150 154	157 380
Inflationary gain offset	- 71 354	- 73 817	- 76 203
Tax allowance	10 781	11 546	12 430
Maximum allowed regulated revenue	339 878	352 143	368 228